

**CONOSTAN® Single Element Standard – Nickel (Ni)**

Revision date: 08/18/2023

Product code: AC18.05879

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**1. Identification**
**Product identifier**

CONOSTAN® Single Element Standard – Nickel (Ni)

**Recommended use of the chemical and restrictions on use**
**Use of the substance/mixture**

 Reagents and laboratory chemicals  
 Only for laboratory and analysis purposes.

**Uses advised against**

Do not use for private purposes (household).

**Details of the supplier of the safety data sheet**
**Details of the supplier of the safety data sheet**

Company name:	AnalytiChem Services, Unipessoal, Lda
Street:	Rua de Júlio Dinis 676 7º
Place:	P-4050-320 Porto
Telephone:	+351 226002917
E-mail:	info@analytichem.com
Contact person:	SDS service department
E-mail:	SDS@analytichem.com
Internet:	www.analytichem.com
Responsible Department:	SDS service department

**Supplier or manufacturer details**

Company name:	AnalytiChem Canada Inc.	
	Québec, CANADA	
Street:	21800 Clark Graham Ave	
Place:	CDN-H9X 4B6 Baie-D'Urfé	
Telephone:	+1 (800) 361-6820	Telefax: +1 (800) 253-5549
E-mail:	info@analytichem.com	
Contact person:	SDS service department	
E-mail:	SDS@analytichem.com	
Internet:	www.analytichem.com	
Responsible Department:	AnalytiChem:	
	EU-Belgium: AnalytiChem Belgium, Industriezone "De Arend" 2, 8210 Zedelgem, Belgium, +32 50 28 83 20	
	EU-Germany: AnalytiChem Germany, Stempelstrasse 6, 47167 Duisburg, Germany, +49 203 51 94 – 200	
	EU-Netherlands: AnalytiChem Netherlands, Communicatieweg 7, 3641 SG Mijdrecht, The Netherlands, +31 297 286848	
	UK: AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England, +44 1869 355 500	
	USA: AnalytiChem USA, 227 China Road, Winslow, Maine, 04901, United States, +1 800-244-8378	
	Canada: AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d'Urfe, H9X 4B6, Canada, +1 514-457-0701	
	Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333	
	+1 703-741-5970 (CHEMTREC)	

**Emergency phone number:**
**Further Information**

No data available

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**2. Hazard(s) identification**

**Classification of the chemical**

Regulation (EC) No 1272/2008

Asp. Tox. 1; H304

Full text of hazard statements: see SECTION 16.

**Label elements**

Regulation (EC) No 1272/2008

**Hazard components for labelling**

White mineral oil, petroleum

Signal word: Danger

**Pictograms:**



**Hazard statements**

H304 May be fatal if swallowed and enters airways  
 EUH208 Contains nickel. May produce an allergic reaction.

**Precautionary statements**

P301+P310 If swallowed: Immediately call a poison center/doctor.  
 P331 Do NOT induce vomiting.  
 P405 Store locked up.  
 P501 Dispose of contents/container to an appropriate recycling or disposal facility.

**Hazards not otherwise classified**

No data available

**3. Composition/information on ingredients**

**Mixtures**

**Relevant ingredients**

CAS No	Components			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
8042-47-5	White mineral oil, petroleum			95 - < 100 %
	232-455-8			
	Asp. Tox. 1; H304			
7440-02-0	nickel			< 1 %
	231-111-4	028-002-00-7		
	Flam. Sol. 2, Carc. 2, Skin Sens. 1, STOT RE 1, Aquatic Chronic 3; H228 H351 H317 H372 H412			

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Components	Quantity
	Specific Conc. Limits, M-factors and ATE		
8042-47-5	232-455-8	White mineral oil, petroleum	95 - < 100 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		

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**Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

**4. First-aid measures**

**Description of first aid measures**

**General information**

No data available

**After inhalation**

Provide fresh air.  
Call a doctor if you feel unwell.

**After contact with skin**

Wash immediately with: Water, Soap  
Take off immediately all contaminated clothing and wash it before reuse.  
In case of skin irritation, consult a physician.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.  
In case of eye irritation consult an ophthalmologist.

**After ingestion**

Observe risk of aspiration if vomiting occurs.  
Call a physician immediately.

**Most important symptoms and effects, both acute and delayed**

Gastrointestinal complaints  
Pneumonia  
Vapors may cause drowsiness and dizziness.  
Dizziness  
Depression of central nervous system  
Headache

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**5. Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing media**

Foam  
Carbon dioxide (CO<sub>2</sub>)  
Extinguishing powder  
Water

**Unsuitable extinguishing media**

no restriction

**Specific hazards arising from the chemical**

Combustible liquids  
Hazardous combustion products  
In case of fire may be liberated:  
Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
In case of warming:  
Vapors are heavier than air, spread along floors and form explosive mixtures with air.

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**Special protective equipment and precautions for fire-fighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Use water spray jet to protect personnel and to cool endangered containers.

Move undamaged containers from immediate hazard area if it can be done safely.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

**General advice**

In case of warming:

Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Take precautionary measures against static discharges.

**For non-emergency personnel**

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapors/spray.

**For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment (PPE): see section 8

**Environmental precautions**

Do not allow to enter into surface water or drains.

**Methods and material for containment and cleaning up**

**For containment**

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

**For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

**Other information**

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear breathing apparatus if exposed to vapors/dusts/aerosols.

**Reference to other sections**

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Disposal: see section 13

**7. Handling and storage**

**Precautions for safe handling**

**Advice on safe handling**

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment.

Do not breathe vapor or spray.

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Provide adequate ventilation.

**Advice on protection against fire and explosion**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharges.

In case of warming:

Vapors are heavier than air, spread along floors and form explosive mixtures with air.

**Advice on general occupational hygiene**

Keep away from food, drink and animal feedingstuffs.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of the protective agents should be clarified with their suppliers.

**Further information on handling**

Take off immediately all contaminated clothing and wash it before reuse.

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

**Conditions for safe storage, including any incompatibilities**
**Requirements for storage rooms and vessels**

Store in a well-ventilated place.

Keep container tightly closed.

**Hints on joint storage**

TRGS 510

**Further information on storage conditions**

Keep cool. Protect from sunlight.

**Specific end use(s)**

Laboratory chemicals

**8. Exposure controls/personal protection**
**Control parameters**
**Exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	Category	Origin
7440-02-0	Nickel elemental (inhalable fraction)		1.5	TWA (8 h)	ACGIH-2025
7440-02-0	Nickel metal and other compounds (as Ni)	0.015	-	TWA (8 h)	REL
7440-02-0	Nickel, metal and insoluble compounds (as Ni)	-	1	TWA (8 h)	PEL

**Biological Exposure Indices (BEI-ACGIH)**

CAS No	Substance	Determinant	Value	Test material	Sampling time
7440-02-0	NICKEL	Nickel	5 µg/L	urine	Post-shift at end of workweek

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**DNEL/DMEL values**

CAS No	Substance			
DNEL type	Exposure route	Effect	Value	
8042-47-5	White mineral oil, petroleum			
Worker DNEL, long-term	inhalation	systemic	160 mg/m <sup>3</sup>	
Worker DNEL, long-term	dermal	systemic	220 mg/kg bw/day	
Consumer DNEL, long-term	inhalation	systemic	35 mg/m <sup>3</sup>	
Consumer DNEL, long-term	dermal	systemic	93 mg/kg bw/day	
Consumer DNEL, long-term	oral	systemic	40 mg/kg bw/day	

**Exposure controls**

**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

- goggles
- Face protection umbrella

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**

- Take off immediately all contaminated clothing and wash it before reuse .
- Wash hands and face before breaks and after work and take a shower if necessary .
- Draw up and observe skin protection programme.

**Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation  
 The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Thermal hazards**

No data available

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

**9. Physical and chemical properties**

**Information on basic physical and chemical properties**

Physical state:	Liquid	
Color:	colorless	
Odor:	like: Hydrocarbons	
Odour threshold:	No data available	
Melting point/freezing point:		No data available

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Boiling point or initial boiling point and boiling range:	>315 °C
Flammability:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	93-99 °C
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value:	No data available
Viscosity / kinematic:	14,2-17 mm <sup>2</sup> /s
Water solubility:	No data available
Solubility in other solvents	
No data available	
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	No data available
Dispersion stability:	No data available
Vapor pressure:	No data available
Vapor pressure:	No data available
Density:	0,6-0,9 g/cm <sup>3</sup>
Relative density:	No data available
Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

**Other information**
**Information with regard to physical hazard classes**
**Explosive properties**

In case of warming:

Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Sustained combustibility:

No data available

Self-ignition temperature

Solid:

No data available

Gas:

No data available

**Oxidizing properties**

No data available

**Other safety characteristics**

Evaporation rate:

No data available

Solvent separation test:

No data available

Solvent content:

100%

Solid content:

No data available

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

No data available

Viscosity / dynamic:

No data available

Flow time:

No data available

**Further Information**

No data available

**10. Stability and reactivity**

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**Reactivity**

In case of warming:  
Vapours may form explosive mixtures with air.

**Chemical stability**

The product is stable under storage at normal ambient temperatures.

**Possibility of hazardous reactions**

Oxidising agent

**Conditions to avoid**

Heat  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Incompatible materials**

No data available

**Hazardous decomposition products**

in case of fire, see:  
SECTION 5: Fire fighting measures

**Further information**

No data available

**11. Toxicological information**
**Information on toxicological effects**
**Toxicokinetics, metabolism and distribution**

No data available

**Acute toxicity**

Based on available data, the classification criteria are not met.

**ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
8042-47-5	White mineral oil, petroleum				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1987)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (1987)	OECD Guideline 402

**Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.  
 Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.  
 slightly irritant but not relevant for classification.  
 Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).  
 May cause respiratory irritation.

**Sensitizing effects**

Based on available data, the classification criteria are not met.  
 Contains nickel. May produce an allergic reaction.

**Carcinogenic/mutagenic/toxic effects for reproduction**

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Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

**Specific target organ toxicity (STOT) - single exposure**

Based on available data, the classification criteria are not met.

**Specific target organ toxicity (STOT) - repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

May be fatal if swallowed and enters airways

**Route(s) of Entry**

No data available

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**Information on other hazards**

**Endocrine disrupting properties**

No data available

**Other information**

No data available

**Further information**

Gastrointestinal complaints

Pneumonia

Vapors may cause drowsiness and dizziness.

Dizziness

Depression of central nervous system

Headache

**12. Ecological information**

**Ecotoxicity**

Based on available data, the classification criteria are not met.

CAS No	Components					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
8042-47-5	White mineral oil, petroleum					
	Acute fish toxicity	LC50 > 10000 mg/l	96 h	Lepomis macrochirus	REACH Registration Dossier	Method: other: procedure as detailed in
	Acute crustacea toxicity	EC50 > 100 mg/l	48 h	Daphnia magna	Study report (2008)	OECD Guideline 202

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

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**Partition coefficient n-octanol/water**

CAS No	Components	Log Pow
8042-47-5	White mineral oil, petroleum	> 6

**Mobility in soil**

No data available

**Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**Other adverse effects**

Do not allow to enter into surface water or drains.

**Further information**

Avoid release to the environment.

**13. Disposal considerations**
**Waste treatment methods**
**Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations.

Do not allow to enter into surface water or drains.

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.

Waste codes/waste designations according to EWC/AVV

**14. Transport information**
**Land transport (ADR/RID)**
**UN number or ID number:**

No dangerous good in sense of this transport regulation.

**UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**Packing group:**

No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**
**UN number or ID number:**

No dangerous good in sense of this transport regulation.

**UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**Packing group:**

No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**
**UN number or ID number:**

No dangerous good in sense of this transport regulation.

**UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**Packing group:**

No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**
**UN number or ID number:**

No dangerous good in sense of this transport regulation.

**UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**Packing group:**

No dangerous good in sense of this transport regulation.

**Environmental hazards**

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ENVIRONMENTALLY HAZARDOUS: No

**Special precautions for user**

No dangerous good in sense of this transport regulation.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No dangerous good in sense of this transport regulation.

**15. Regulatory information**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 27, Entry 75

Information according to Directive 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

**National regulatory information**

Water hazard class (D):

1 - slightly hazardous to water

**16. Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 2,13.

**Abbreviations and acronyms**

Flam. Sol. 2: Flammable solids

Asp. Tox. 1: Aspiration hazard

Skin Sens. 1: Skin sensitisation

Carc. 2: Carcinogenicity

STOT RE 1: Specific target organ toxicity repeated or prolonged exposure

Aquatic Chronic 3: Chronic aquatic hazard

**Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008**

Classification	Classification procedure
Asp. Tox. 1; H304	Calculation method

**Relevant H statements (full text)**

H228	Flammable solid
H304	May be fatal if swallowed and enters airways
H317	May cause an allergic skin reaction
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects
EUH208	Contains nickel. May produce an allergic reaction.

**Other data**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. Provide appropriate information, instructions and training to users.

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**Identified uses**

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	PC21	-	-	21	15	-	-	-	
2	PROC15	-	-	-	15	-	-	-	

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*